

**Weighted Average Manufacturing Costs**  
**for Butter, Nonfat Powder, Skim Whey Powder and Cheddar Cheese**  
**1989 - 2005**  
Adjusted September 2005

Costs include processing labor, non-labor processing, packaging, other ingredients (for butter and Cheddar cheese only), general and administrative and return on investments.

<u><b>Date of Release</b></u>		<u><b>Butter</b></u>		<u><b>Nonfat Powder</b></u>		<u><b>Cheddar Cheese<sup>1</sup></b></u>		<u><b>Skim Whey Powder</b></u>	
<u><b>Year</b></u>	<u><b>Month</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>
1989	May	\$0.0879	11	\$0.1370	11	\$0.2251	9		
1992	July	\$0.0969	12	\$0.1443	12	\$0.2010	9		
1995	November	\$0.0928	9	\$0.1328	9	\$0.1981	8		
1996	December	\$0.0970	9	\$0.1333	9	\$0.1898	8		
1997	July	\$0.0958	8	\$0.1327	9	\$0.1840	9		
1999	February	\$0.0930	8	\$0.1277	9	\$0.1759	10		
2000	February	\$0.0957	8	\$0.1356	10	\$0.1693	9		
2001	October <sup>2</sup>	\$0.1001	8	\$0.1590	11	\$0.1802	9		
2002	November <sup>3</sup>	\$0.1208	7	\$0.1619	11	\$0.1775	9		
2003	November <sup>4</sup>	\$0.1235	7	\$0.1464	10	\$0.1632	9		
2004	November <sup>5</sup>	\$0.1299	7	\$0.1560	10	\$0.1706	9	\$0.2675	4
2005	November <sup>6</sup>	\$0.1368	8	\$0.1543	10	\$0.1769	7	\$0.2673	3
2006	February <sup>7</sup>	\$0.1396	8	\$0.1666	10	\$0.1828	7	\$0.2933	3

<sup>1</sup> For the 1996 Cheddar cheese cost study and subsequent cost studies, we have included costs associated with Cheddar cheese plants producing 500 pound barrels and 640 pound blocks. However, costs for packaging labor and packaging expenses were replaced with the average of those costs associated with 40 pound block plants.

<sup>2</sup> Includes the cost studies completed for periods between January 1998 and December 1999 and adjusted for utility costs. The utility cost adjustments were made using each plant's invoices for energy costs for August 2001.

<sup>3</sup> Includes the unadjusted cost studies for periods between July 2000 and December 2001.

<sup>4</sup> Includes the unadjusted cost studies for periods between January and December 2002.

<sup>5</sup> Includes the unadjusted cost studies for periods between January and December 2003.

<sup>6</sup> Includes the unadjusted cost studies for periods between January and December 2004.

<sup>7</sup> Includes the adjusted cost studies for periods between January and December 2004 and adjusted for September 2005 utility invoices as well as the most current 2005 data updating wages, payroll taxes and fringe benefits for all plants.

## Butter Processing Costs

Adjusted for Utilities and Labor - September 2005

1. Manufacturing cost data were collected and summarized from eight California butter plants. The eight plants processed 382.9 million pounds of butter during the study period, representing 99.9% of the butter processed in California.
2. The processing costs summarized in this study were incurred during a 12-month period, starting in January 2004 and concluding in December 2004.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes both bulk butter and cut butter, but the costs reflect only costs for bulk butter (25 kg and 68 lb. blocks).
5. To obtain the weighted average, individual plant costs were weighted by their butter processing volume relative to the total volume of butter processed by all plants involved in the cost study.
6. The current manufacturing cost allowance for butter is \$0.156 per pound. About 75% of the butter was processed at a cost less than the manufacturing cost allowance.

Cost Groups	Number of Plants	Processing <u>Labor</u>	Processing <u>Non-Labor</u>	<u>Package</u>	Other <u>Ingredient</u>	General & <u>Administrative</u>	Return on <u>Investment</u>	Total Cost	Volume <u>in Group</u>	Percent in <u>Group</u>
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dollars per pound of butter										
Low Cost	4	\$0.0449	\$0.0478	\$0.0098	\$0.0045	\$0.0118	\$0.0068	\$0.1256	288,092,738	75.2%
High Cost	4	\$0.0705	\$0.0672	\$0.0106	\$0.0026	\$0.0256	\$0.0061	\$0.1826	94,838,606	24.8%
<u>Summary Statistics</u>										
Weighted Average		\$0.0512	\$0.0526	\$0.0100	\$0.0040	\$0.0152	\$0.0066	\$0.1396		
Range {	Minimum	\$0.0402	\$0.0360	\$0.0073	\$0.0016	\$0.0053	\$0.0038			
	Maximum	\$0.1918	\$0.1151	\$0.0141	\$0.0086	\$0.0914	\$0.0103			
Total									382,931,344	100%

## Adjusted for Utilities and Labor - September 2005

6. The current manufacturing cost allowance for nonfat powder is \$0.152 per pound. About 63% of the nonfat powder was processed at a cost less than the manufacturing cost allowance.

[illegible]

## Cheese Processing Costs

*Adjusted for Utilities and Labor - September 2005*

1. Manufacturing cost data were collected and summarized from seven California cheese plants. The seven plants processed 817 million pounds of cheese during the study period, representing 98.5% of the Cheddar and Monterey Jack cheese processed in California.
2. The processing costs summarized in this study were incurred during a 12-month period, starting in January 2004 and concluding in December 2004.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes both Cheddar and Monterey Jack cheeses, but the costs reflect only costs for 40 lb. blocks of Cheddar.
5. Three plants processed 500-lb. barrels or 640-lb. blocks. Packaging costs and packaging labor for 40 lb. blocks were substituted for these plants.
6. To obtain the weighted average, individual plant costs were weighted by their cheese processing volume relative to the total volume of cheese processed by all plants involved in the cost study.
7. The current manufacturing cost allowance for cheese is \$0.171 per pound. About 62% of the cheese was processed at a cost less than the manufacturing cost allowance.
8. The weighted average yield was 11.08 lbs. of cheese per hundredweight of milk. The weighted average moisture was 37.84%, and weighted average vat tests were 4.02% fat and 9.05% SNF.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>Other Ingredient</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>	<u>Percent in Group</u>
<i>dollars per pound of cheese</i>										
Low Cost	3	\$0.0407	\$0.0810	\$0.0180	\$0.0089	\$0.0190	\$0.0094	\$0.1770	628,560,303	76.9%
High Cost	4	\$0.0713	\$0.0628	\$0.0206	\$0.0188	\$0.0244	\$0.0042	\$0.2021	188,508,025	23.1%
<u>Summary Statistics</u>										
<b>Weighted Average</b>		<b>\$0.0477</b>	<b>\$0.0768</b>	<b>\$0.0186</b>	<b>\$0.0112</b>	<b>\$0.0203</b>	<b>\$0.0082</b>	<b>\$0.1828</b>		
Range	{ Minimum Maximum	\$0.0340	\$0.0591	\$0.0146	\$0.0066	\$0.0076	\$0.0024			
		\$0.0856	\$0.0838	\$0.0281	\$0.0289	\$0.0299	\$0.0128			
Total									817,068,328	100%

## Skim Whey Powder Processing Costs

*Adjusted for Utilities and Labor - September 2005*

1. Manufacturing cost data was collected and summarized from three California skim whey powder plants. The three plants processed 93.2 million pounds of skim whey powder during the study period, representing 79% of the skim whey powder processed in California in 2004.
2. The processing costs summarized in this study were incurred during a 14-month period, starting in November 2003 and concluding in December 2004.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes skim whey powder packaged in container sizes of 25 kg and 50 lb. bags.
5. To obtain the weighted average, individual plant costs were weighted by their skim whey powder processing volume relative to the total volume of skim whey powder processed by all plants involved in the cost study.
6. The current manufacturing cost allowance for skim whey powder is \$0.20 per pound. All three plants processed skim whey powder at costs higher than the manufacturing cost allowance.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>
		<i>dollars per pound of powder</i>						
<b>Weighted Average</b>	<b>3</b>	<b>\$0.0644</b>	<b>\$0.1739</b>	<b>\$0.0126</b>	<b>\$0.0026</b>	<b>\$0.0398</b>	<b>\$0.2933</b>	<b>93,271,893</b>

### Summary Statistics

Range	{ Minimum	\$0.0514	\$0.1615	\$0.0091	\$0.0013	\$0.0314
	{ Maximum	\$0.0782	\$0.2219	\$0.0199	\$0.0049	\$0.0514

**Weighted Average Manufacturing Costs  
for Butter, Nonfat Powder, Skim Whey Powder and Cheddar Cheese  
1989 - 2005**

Adjusted January - September 2005

Costs include processing labor, non-labor processing, packaging, other ingredients (for butter and Cheddar cheese only), general and administrative and return on investments.

<u><b>Date of Release</b></u>		<u><b>Butter</b></u>		<u><b>Nonfat Powder</b></u>		<u><b>Cheddar Cheese<sup>1</sup></b></u>		<u><b>Skim Whey Powder</b></u>	
<u><b>Year</b></u>	<u><b>Month</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>	<u><b>Cost per Pound</b></u>	<u><b>Number of Plants</b></u>
1989	May	\$0.0879	11	\$0.1370	11	\$0.2251	9		
1992	July	\$0.0969	12	\$0.1443	12	\$0.2010	9		
1995	November	\$0.0928	9	\$0.1328	9	\$0.1981	8		
1996	December	\$0.0970	9	\$0.1333	9	\$0.1898	8		
1997	July	\$0.0958	8	\$0.1327	9	\$0.1840	9		
1999	February	\$0.0930	8	\$0.1277	9	\$0.1759	10		
2000	February	\$0.0957	8	\$0.1356	10	\$0.1693	9		
2001	October <sup>2</sup>	\$0.1001	8	\$0.1590	11	\$0.1802	9		
2002	November <sup>3</sup>	\$0.1208	7	\$0.1619	11	\$0.1775	9		
2003	November <sup>4</sup>	\$0.1235	7	\$0.1464	10	\$0.1632	9		
2004	November <sup>5</sup>	\$0.1299	7	\$0.1560	10	\$0.1706	9	\$0.2675	4
2005	November <sup>6</sup>	\$0.1368	8	\$0.1543	10	\$0.1769	7	\$0.2673	3
2006	February <sup>7</sup>	\$0.1384	8	\$0.1591	10	\$0.1791	7	\$0.2742	3

<sup>1</sup> For the 1996 Cheddar cheese cost study and subsequent cost studies, we have included costs associated with Cheddar cheese plants producing 500 pound barrels and 640 pound blocks. However, costs for packaging labor and packaging expenses were replaced with the average of those costs associated with 40 pound block plants.

<sup>2</sup> Includes the cost studies completed for periods between January 1998 and December 1999 and adjusted for utility costs. The utility cost adjustments were made using each plant's invoices for energy costs for August 2001.

<sup>3</sup> Includes the unadjusted cost studies for periods between July 2000 and December 2001.

<sup>4</sup> Includes the unadjusted cost studies for periods between January and December 2002.

<sup>5</sup> Includes the unadjusted cost studies for periods between January and December 2003.

<sup>6</sup> Includes the unadjusted cost studies for periods between January and December 2004.

<sup>7</sup> Includes the adjusted cost studies for periods between January and December 2004 and adjusted for January through September 2005 utility invoices as well as the most current 2005 data updating wages, payroll taxes and fringe benefits for all plants.

## Adjusted for Utilities and Labor - January thru September 2005

- | <u>Cost Groups</u>                 | <u>Number of Plants</u> | <u>Processing Labor</u> | <u>Processing Non-Labor</u> | <u>Package</u>  | <u>Other Ingredient</u> | <u>General &amp; Administrative</u> | <u>Return on Investment</u> | <u>Total Cost</u> | <u>Volume in Group</u> | <u>Percent in Group</u> |
|------------------------------------|-------------------------|-------------------------|-----------------------------|-----------------|-------------------------|-------------------------------------|-----------------------------|-------------------|------------------------|-------------------------|
| <i>dollars per pound of butter</i> |                         |                         |                             |                 |                         |                                     |                             |                   |                        |                         |
| Low Cost                           | 4                       | \$0.0449                | \$0.0465                    | \$0.0098        | \$0.0045                | \$0.0117                            | \$0.0068                    | \$0.1242          | 288,092,738            | 75.2%                   |
| High Cost                          | 4                       | \$0.0705                | \$0.0662                    | \$0.0106        | \$0.0026                | \$0.0256                            | \$0.0061                    | \$0.1816          | 94,838,606             | 24.8%                   |
| <u>Summary Statistics</u>          |                         |                         |                             |                 |                         |                                     |                             |                   |                        |                         |
| <b>Weighted Average</b>            |                         | <b>\$0.0512</b>         | <b>\$0.0514</b>             | <b>\$0.0100</b> | <b>\$0.0040</b>         | <b>\$0.0152</b>                     | <b>\$0.0066</b>             | <b>\$0.1384</b>   |                        |                         |
| Range                              | {                       | Minimum                 | \$0.0402                    | \$0.0346        | \$0.0073                | \$0.0016                            | \$0.0053                    | \$0.0038          |                        |                         |
|                                    |                         | Maximum                 | \$0.1918                    | \$0.1146        | \$0.0141                | \$0.0086                            | \$0.0914                    | \$0.0103          |                        |                         |
| Total                              |                         |                         |                             |                 |                         |                                     |                             |                   | 382,931,344            | 100%                    |

### Nonfat Powder Processing Costs

Adjusted for Utilities and Labor - January thru September 2005

1. Manufacturing cost data were collected and summarized from 10 California nonfat powder plants. The 10 plants processed 745 million pounds of nonfat powder during the study period, representing 99.17% of the nonfat powder processed in California.
2. The processing costs summarized in this study were incurred during a 12-month period, starting in January 2004 and concluding in December 2004.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes all grades of nonfat powder packaged in any container size, but the costs reflect only costs for 25 kg and 50 lb. bags of nonfat powder.
5. To obtain the weighted average, individual plant costs were weighted by their nonfat powder processing volume relative to the total volume of nonfat powder processed by all plants involved in the cost study.
6. The current manufacturing cost allowance for nonfat powder is \$0.152 per pound. About 63% of the nonfat powder was processed at a cost less than the manufacturing cost allowance.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>	<u>Percent in Group</u>
<hr/>									
<i>dollars per pound of powder</i>									
Low Cost	3	\$0.0293	\$0.0836	\$0.0141	\$0.0089	\$0.0068	\$0.1427	468,014,288	62.8%
Medium Cost	4	\$0.0363	\$0.1015	\$0.0152	\$0.0136	\$0.0099	\$0.1765	238,532,017	32.0%
High Cost	3	\$0.0844	\$0.1313	\$0.0115	\$0.0122	\$0.0108	\$0.2502	38,852,610	5.2%
<u>Summary Statistics</u>									
<b>Weighted Average</b>		<b>\$0.0344</b>	<b>\$0.0918</b>	<b>\$0.0143</b>	<b>\$0.0106</b>	<b>\$0.0080</b>	<b>\$0.1591</b>		
Range	{	Minimum	\$0.0283	\$0.0776	\$0.0096	\$0.0075	\$0.0032		
		Maximum	\$0.1044	\$0.2080	\$0.0158	\$0.0351	\$0.0157		
Total								745,398,915	100%



## Cheese Processing Costs

Adjusted for Utilities and Labor - January thru September 2005

1. Manufacturing cost data were collected and summarized from seven California cheese plants. The seven plants processed 817 million pounds of cheese during the study period, representing 98.5% of the Cheddar and Monterey Jack cheese processed in California.
2. The processing costs summarized in this study were incurred during a 12-month period, starting in January 2004 and concluding in December 2004.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes both Cheddar and Monterey Jack cheeses, but the costs reflect only costs for 40 lb. blocks of Cheddar.
5. Three plants processed 500-lb. barrels or 640-lb. blocks. Packaging costs and packaging labor for 40 lb. blocks were substituted for these plants.
6. To obtain the weighted average, individual plant costs were weighted by their cheese processing volume relative to the total volume of cheese processed by all plants involved in the cost study.
7. The current manufacturing cost allowance for cheese is \$0.171 per pound. About 62% of the cheese was processed at a cost less than the manufacturing cost allowance.
8. The weighted average yield was 11.08 lbs. of cheese per hundredweight of milk. The weighted average moisture was 37.84%, and weighted average vat tests were 4.02% fat and 9.05% SNF.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>Other Ingredient</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>	<u>Percent in Group</u>
<hr/>										
<i>dollars per pound of cheese</i>										
Low Cost	3	\$0.0407	\$0.0773	\$0.0180	\$0.0089	\$0.0190	\$0.0094	\$0.1733	628,560,303	76.9%
High Cost	4	\$0.0713	\$0.0594	\$0.0206	\$0.0184	\$0.0243	\$0.0042	\$0.1982	188,508,025	23.1%
<u>Summary Statistics</u>										
<b>Weighted Average</b>		<b>\$0.0477</b>	<b>\$0.0732</b>	<b>\$0.0186</b>	<b>\$0.0111</b>	<b>\$0.0203</b>	<b>\$0.0082</b>	<b>\$0.1791</b>		
Range	{	Minimum	\$0.0340	\$0.0529	\$0.0146	\$0.0066	\$0.0076	\$0.0024		
		Maximum	\$0.0856	\$0.0809	\$0.0281	\$0.0289	\$0.0299	\$0.0128		
Total									817,068,328	100%

## Skim Whey Powder Processing Costs

*Adjusted for Utilities and Labor - January thru September 2005*

1. Manufacturing cost data was collected and summarized from three California skim whey powder plants. The three plants processed 93.2 million pounds of skim whey powder during the study period, representing 79% of the skim whey powder processed in California in 2004.
2. The processing costs summarized in this study were incurred during a 14-month period, starting in November 2003 and concluding in December 2004.
3. The "Processing Non-Labor" category includes costs such as utilities, repairs and maintenance, supplies, depreciation and rent.
4. The volume total includes skim whey powder packaged in container sizes of 25 kg and 50 lb. bags.
5. To obtain the weighted average, individual plant costs were weighted by their skim whey powder processing volume relative to the total volume of skim whey powder processed by all plants involved in the cost study.
6. The current manufacturing cost allowance for skim whey powder is \$0.20 per pound. All three plants processed skim whey powder at costs higher than the manufacturing cost allowance.

<u>Cost Groups</u>	<u>Number of Plants</u>	<u>Processing Labor</u>	<u>Processing Non-Labor</u>	<u>Package</u>	<u>General &amp; Administrative</u>	<u>Return on Investment</u>	<u>Total Cost</u>	<u>Volume in Group</u>
		<hr/> dollars per pound of powder <hr/>						
<b>Weighted Average</b>	<b>3</b>	<b>\$0.0644</b>	<b>\$0.1548</b>	<b>\$0.0126</b>	<b>\$0.0026</b>	<b>\$0.0398</b>	<b>\$0.2742</b>	<b>93,271,893</b>

### Summary Statistics

Range	Minimum	\$0.0487	\$0.1364	\$0.0091	\$0.0013	\$0.0314
	Maximum	\$0.0772	\$0.1921	\$0.0199	\$0.0049	\$0.0514